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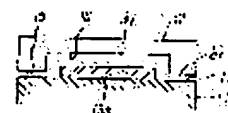
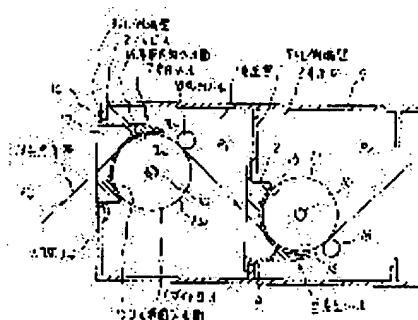
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(54) DIFFERENTIAL-PRESSURE SEALER FOR INNER AND OUTER DIFFERENTIAL-PRESSURE CHAMBER OF CONTINUOUS VACUUM TREATING DEVICE

(57)Abstract:

PURPOSE: To form the subject highly efficient sealer by using a seal piece and a touch roll for the guide roll of a band steel in the differential-pressure chambers before and behind a continuous vacuum treating chamber at the time of introducing a long- sized band steel into the treating chamber.

CONSTITUTION: A long-sized band steel 13 is continuously supplied into the vacuum treating chamber through the differential-pressure chambers 1 and 2, and vacuum deposition, etc., are applied to the steel. In this case, the band steel 13 is brought into contact with guide rolls 11 and 11 in the chambers 1 and 2, and passed through the chambers 1 and 2 which are stepwise depressurized respectively to P1 and P2. The differential-pressure seals 7 and 8 each consisting of the guide roll 11, the seal piece 12, and the touch roll 18 are fixed to the openings 4 and 6 formed at the inlet- side end walls 3 and 5 of the chambers 1 and 2. The seal piece 12 has a roll surface sealing plane 15 sharing a tiny



gap $\delta 1$ with the roll 11 and a concave circular sealing plane 16 sharing a tiny gap $\delta 2$ with the surface of a steel sheet 13a. The touch roll 18 is used to press the band steel 13 on the surface 11a of the guide roll 11, and exhibits excellent differential-pressure sealing.

LEGAL STATUS

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